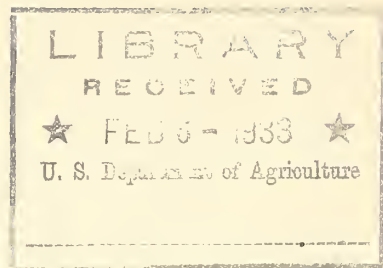


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Bi-1250
Jan. '33



United States Department of Agriculture
Bureau of Biological Survey
Washington, D. C.

FOOD OF THE GRAY FOX

The food habits of the gray fox vary in different parts of its range and depend on the availability and abundance of desirable foods. A food present in one locality may be absent in another, and consequently a certain percentage of the diet is correlated with local conditions. Further, there is change from one season to another, depending on seasonal availability of food items. The statements on food habits that follow are the most accurate that can be made in the present state of our knowledge.

Where rabbits are common, the gray fox is sure to make them one of its major foods. There is no doubt that this fox is one of the controlling agents of rabbits, which are injurious in some parts of the country and potential pests everywhere. In the winter months rabbits compose about 30 per cent of the food of this fox. Mice form another important element in its diet. Several species are taken, including meadow mice, white-footed mice, house mice, and others. Native rats, where common, are also important among the rodent foods. Rabbits, mice, and native rats make up about 50 per cent of the total diet and stand out as staple foods of the fox.

The gray fox is not averse to taking small birds, especially those that get their food from the ground, and occasionally it preys on poultry. In a recent study of the contents of 82 gray-fox stomachs it was found that small birds composed a little more than 6 per cent of all the food. Game birds were found in only three of these stomachs (in one instance a ruffed grouse, and in two cases mourning doves) and contributed little more than 1 per cent of the total food.

The vegetable diet of the gray fox fluctuates with the season and depends a great deal on the crop of wild fruits. In fall and early winter such fruits as apples, persimmons, and grapes are important elements of its food; beechnuts, peanuts, and hickory nuts also are significant. When corn is available, it also is taken, unharvested ears probably furnishing the greater part. The vegetable diet comprises about 20 per cent of the food.

Miscellaneous animal foods include insects, chiefly grasshoppers, caterpillars, and beetles, which are taken frequently, but probably never reach an important percentage in the diet. The average proportion of insects in the food probably does not exceed 5 per cent. Small snakes, turtles, and frogs are taken infrequently and are not to be classed as staple foods.

Carrion is not shunned by gray foxes, but probably is resorted to principally when the animals are hard pressed.

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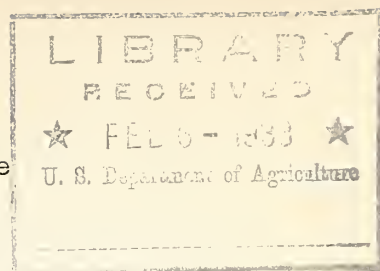
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United States Department of Agriculture
Bureau of Biological Survey
Washington, D. C.



FOOD OF THE RED FOX

The food habits of the red fox do not differ radically from those of its more southern relative, the gray fox. Where the two animals occur together, they feed to a great extent on the same foods in about the same relative percentages.

Recent work on red foxes in Michigan by the School of Forestry and Conservation of the University of Michigan, similar studies in New York by Cornell University, and the Biological Survey's investigations in Virginia indicate that rabbits and mice form the most important food of this fox, these two groups making about 50 per cent of the total. The mice taken most frequently include meadow mice, white-footed mice, and house mice. Other mammals taken include squirrels, muskrats, woodchucks, chipmunks, and spermophiles, but none of these are taken with regularity; they probably make less than 2 per cent of the red fox's diet. Wool of sheep has been noted in a few stomachs; this may have been picked up incidentally with other food or it may represent carrion feeding.

Among birds, the small ground-feeding-ones are most frequently taken, including an occasional quail. Our present knowledge indicates that foxes do not prey upon quail or any other game birds to any great extent. When red foxes live near farmyards, some individuals are likely to make raids on poultry and in this respect may become serious pests. At present there is evidence, although somewhat scant, that the red fox is more inclined to make these raids than the gray fox.

Vegetable foods of the red fox include a variety of fruits, nuts, and some grain. Persimmons, apples, grapes, blueberries, strawberries, and service berries and other small fruits are important as seasonal foods. Beechnuts, peanuts, and occasionally hickory nuts also are eaten. Ripened corn, most of which comes from unharvested ears, is taken in fall and winter.

Miscellaneous animal foods of the red fox include an occasional reptile or amphibian, a considerable number and variety of insects, and some carrion.

